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## The Impact of Industrialized Animal Agriculture on Rural Communities

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**THE HUMANE SOCIETY**  
OF THE UNITED STATES

## **An HSUS Report: The Impact of Industrialized Animal Agriculture on Rural Communities**

### **Abstract**

Industrialized animal agriculture production practices and systems not only jeopardize the welfare of farm animals and the environment, but also negatively impact public health, independent family farmers, and quality of life in rural communities. The tolls exacted on rural communities necessitate dramatic and immediate changes in animal agriculture.

### **Introduction**

Concentrated animal feeding operations (CAFOs), also known as factory farms, tend to cluster in geographic locales where input costs, those expenses for components such as land and labor, are lower, and where their vertically integrated infrastructure is well-developed.<sup>1</sup> Within animal agriculture, vertical integration typically involves ownership of both farm animal production and processing. For example, a large, vertically integrated turkey operation may include a hatchery, feed mill, grow-out sheds, and slaughter and processing or packing plants.<sup>2</sup>

Factory farms are less likely to move into regions, whether communities or states, with the most stringent regulations. These areas tend to be ones with existing environmental problems,<sup>\*</sup> the greatest number of potentially harmful production systems, or nearby towns and counties inhabited by citizens concerned about the local environment.<sup>3</sup>

As noted in Environmental Management of Concentrated Animal Feeding Operations (CAFOs), “regulations and legislation have fallen behind CAFO creation and operation, enforcement of existing regulations is spotty, and problems associated with CAFOs are still being identified—although you can be sure those who neighbor CAFOs can identify some big issues, both environmental and social.”<sup>4</sup> One oft-cited example of geographic concentration of large-scale farm animal factories is the state of Iowa, which leads the United States in both egg<sup>5</sup> and pig<sup>6</sup> production. Over two decades, Iowans saw an approximately 84% decrease in the state’s total number of farms that raise pigs; during the same period, however, there was a nearly six-fold increase in the average number of pigs per farm, from 252 animals to 1,428.<sup>7</sup> A 2003 survey of rural Iowans indicated that the development of pig CAFOs was less desirable than construction of prisons, solid waste landfills, slaughter plants, and sewage treatment plants.<sup>8</sup>

### **Public Health**

The wealth of information linking factory farms with illness led the world’s largest association of public health professionals, the American Public Health Association, to evaluate the issue in 2003 and subsequently issue a policy statement urging federal, state, and local governments and public health agencies to impose a moratorium on the construction of new factory farms “until additional scientific data on the attendant risks to public health have been collected and uncertainties resolved.”<sup>9</sup>

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<sup>\*</sup> For more information, see “An HSUS Report: The Impact of Industrialized Animal Agriculture on the Environment” at [www.hsus.org/farm/resources/research/enviro/animal\\_agriculture\\_environment.html](http://www.hsus.org/farm/resources/research/enviro/animal_agriculture_environment.html).

Factory farm manure contains a number of byproducts of concern to human health, including heavy metals, pathogen bacteria, and volatile gases.<sup>9</sup> Numerous studies have found such respiratory problems among factory farm workers as chronic bronchitis, occupational asthma, and Organic Dust Toxic Syndrome.<sup>10</sup> Employees of these facilities are not the only ones at risk, however. Studies published in 2006 found that children who attend schools near CAFOs suffer elevated incidences of asthma symptoms,<sup>11,12</sup> and other research has documented the problems factory farms create for the health of those who live close to them. In one study, researchers compared physical health symptoms of residents in three communities in North Carolina—two near factory farms housing either pigs or cattle and one in another rural area without any agricultural operations using liquid waste management systems.<sup>13</sup> Residents near the pig factory farm reported more frequent occurrences of “headache, runny nose, sore throat, excessive coughing, diarrhea, and burning eyes.”<sup>13</sup> Another study found that neighbors of a pig factory farm also suffered from respiratory problems, nausea, weakness, and chest tightness.<sup>14</sup>

The way odors affect the moods of individuals living near a pig factory farm has also been investigated, as negative mood can affect immunity.<sup>15</sup> The gaseous emissions from factory farms emanate from the buildings where animals are confined, waste storage systems, and land application of waste,<sup>16</sup> and odors are produced by decomposing feces, spilled feed, and urine.<sup>15</sup> Compared to the control group in the study, individuals living near the factory farm who encountered the odors had “significantly more tension, more depression, more anger, less vigor, more fatigue, and more confusion.”<sup>15</sup> Determined a 2002 report released by Iowa State University and the University of Iowa, hydrogen sulfide and ammonia emissions from factory farms can pose a health risk to humans.<sup>16</sup>

## **Independent Farmers and Contract Growers**

Factory farms have made it increasingly difficult, if not impossible, for independent family farms to survive as competition with large-scale corporate operations is challenging. Many once-independent farmers resort to contractual arrangements with large agribusiness corporations,<sup>17</sup> raising the companies’ animals until slaughter. “Contract growing” now makes up much of the factory farming industry, particularly in the pig and poultry sectors.<sup>17</sup> By 1999, contract production accounted for more than 60% of U.S. pig production and 35% of cattle production.<sup>18</sup> Today, poultry production is now almost entirely contract-based.<sup>17</sup>

In such contractual arrangements, the corporations typically supply company-owned animals, feed, and transportation, and the “growers,” who likely own the land, construct company-approved buildings, which may require a personal investment of hundreds of thousands of dollars.<sup>19</sup> Contractees are also typically responsible for managing the animals’ waste, so the companies may have no financial obligation to control or rectify pollution from these facilities that are set up according to the corporations’ own specifications.<sup>20,21</sup>

Robert Taylor, an agricultural economist at Auburn University, has reportedly found that chicken grower contracts are predominantly deceptive. The contract’s base pay, for example, may be much higher than the actual pay most contract growers will earn over the life of the agreement, with the contract’s proffered net income failing to account for economic depreciation or other costs.<sup>22</sup>

Financial considerations are indeed significant concerns in the contract grower system. A 2001 study commissioned by the U.S. Department of Agriculture and conducted by Farmers’ Legal Action Group found that 75% of the contractees surveyed felt that entering broiler chicken production had been a good decision, yet only 35% said they would recommend the same decision to others.<sup>23</sup> According to the United Food and Commercial Workers Union, more than 71% of all contract chicken growers earn below poverty-level wages.<sup>24</sup>

Among sociologists and those who advocate for the rights of contract growers, a great deal of attention is devoted to “the general well-being of contractees (operators) and their families given their asymmetrical relationship in bargaining power with agribusiness firms” and “the bargaining power of external agribusiness is likely to result in a greater of share of risks and costs of production borne by contractees and their families.”<sup>25</sup>

For individuals in the community, concern over the decline in independent family farms, coupled with the pressures of reduced quality of life and potential resultant socioeconomic disadvantages when factory farms move in, can contribute to CAFO-related post-traumatic stress disorder symptoms.<sup>26</sup>

## **Quality of Life**

Studies have shown that property values can decline substantially when residences are in close proximity to a CAFO.<sup>27-29</sup> According to an article in the journal of The Appraisal Institute, an international association of professional real estate appraisers, case studies demonstrate that “diminished marketability, loss of use and enjoyment, and loss of exclusivity can result in a diminishment ranging from 50% to nearly 90% of otherwise unimpaired value.”<sup>27</sup> Researchers in Pennsylvania have found that neighboring house prices decrease once the total live weight of confined animals exceeds 200,000 pounds.<sup>30</sup>

A study conducted in five counties in North-Central Iowa found that nearby residences downwind of a confinement operation may suffer a 10% drop in property value.<sup>29</sup> Thus, residents of the community may suffer economic harm for the financial benefit of the company that has contracted with an individual to operate the facility.

Studies have also documented the beneficial impacts independent farms can have on communities, as well as the costs that accompany the increase in factory farms. A 1994 University of Missouri study suggested that one “logical strategy for increasing employment in hog production is to support beginning hog farmers who might choose ‘low-investment,’ pasture production systems. . . In terms of hog farm employment, ten low-investment units would produce 12,000 feeder pig[s] per year and create 8 full-time positions. A single contract farrowing unit producing about the same number of pigs but [*sic*] would employ only 2.5 people.”<sup>31</sup>

According to a 1996 University of Iowa study, “an important reason for advocating industrial scale hog production is its touted efficiency—it reduces the amount of labor required per unit of production. If intensive industrial swine facilities are indeed more efficient, then the number of jobs will be reduced. Industry cannot have it both ways.”<sup>32</sup> The study also found that “[w]here large scale operations are present there are fewer farms and fewer hog farms. In rural areas, where there are fewer small-to-moderate hog operations, there are declines in economic well-being as reflected in increased food stamp usage.”<sup>32</sup>

A 2000 Illinois State University study concluded that “[c]ontrary to mainstream positions in the agricultural economics literature, the results reject the hypothesis that large hog farming units contribute to the vitality of local economies. Instead, the several models developed here consistently suggest that large hog farms tend to hinder economic growth in rural communities.”<sup>33</sup> A 2007 review article found that “[e]conomic concentration of agricultural operations tends to remove a higher percentage of money from rural communities than when the industry is dominated by smaller farm operations, which tend to circulate money within the community.”<sup>17</sup>

## **Conclusion**

In April 2008, the Pew Commission on Industrial Farm Animal Production released the results of a 2.5-year investigation<sup>34</sup> into the problems associated with today’s customary animal agriculture practices and systems. The Commission’s 15 expert members focused on the impacts of industrial farm animal production on animal welfare, the environment, public health, and the vitality of rural communities,<sup>20</sup> and determined that industrial farm animal production “often poses unacceptable risks to public health, the environment and the welfare of the animals themselves.”<sup>34</sup>

In its chapter entitled “Rural America,” the Commission concluded:

Research consistently shows that the social and economic well-being of rural communities benefits from larger numbers of farmers rather than fewer farms that produce increased volumes. In rural communities where fewer, larger farms have replaced smaller, locally owned

farms, residents have experienced lower family income, higher poverty rates, lower retail sales, reduced housing quality, and persistent low wages for farm workers.<sup>34</sup>

Indeed, the billions of animals raised for meat, eggs, and milk in today's industrial animal agribusiness industries are not the only ones who suffer from factory farming. Employees and individuals who live near these facilities are also impacted by today's animal agriculture systems. In addition to impairing water and air quality in surrounding areas, factory farms threaten public health, jeopardize the ability of independent family farms to stay in business, and deteriorate quality of life in rural communities. In this way, communities in which these operations are situated are left to contend with their detrimental impacts for the benefit of agribusiness corporations.

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